

### **REMARKS**

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 1 and 3-13 are now present in this application. Claims 1, 3, 6, 7, 9 and 13 are independent.

By this Amendment, claim 2 is canceled, claims 1, 3, 5-7 and 9-11 are amended, and claim 13 is added. No new matter is involved.

Reconsideration of this application, as amended, is respectfully requested.

### **Priority Under 35 U.S.C. § 119**

Applicants thank the Examiner for acknowledging Applicants' claim for foreign priority under 35 U.S.C. § 119, and receipt of the certified priority document.

### **Information Disclosure Citation**

Applicants thank the Examiner for considering the reference supplied with the Information Disclosure Statements filed on April 6, 2006; June 6, 2006; and July 6, 2006, and for providing Applicants with an initialed copy of each form PTO/SB/08 filed therewith.

### **Obviousness-Type Double Patenting Rejection**

Claims 1-3, 5 and 10-12 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 and 6-8 of copending Application Serial No. 10/748,295 in view of EP 0 786 228 ("EP '228"). This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

While not conceding the appropriateness of the Examiner's rejection, but merely to advance prosecution of the instant application, Applicants are herewith submitting a Terminal

Disclaimer disclaiming the terminal portion of any patent granted on the present application which would extend beyond the expiration of any patent which issues from U.S. Application No. 10/748,295. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

**Rejection Under 35 U.S.C. § 102**

Claims 1-3, 5, 10 and 12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by EP '228. This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

During patent examination the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. In *re* Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re* Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). If the PTO fails to meet this burden, then the Applicant is entitled to the patent.

Applicants respectfully submit that the PTO has failed to meet this burden.

A prior art reference anticipates the subject matter of a claim when that reference discloses every feature of the claimed invention, either explicitly or inherently. *In re* Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997) and *Hazani v. Int'l Trade Comm'n*, 126 F.3d 1473, 1477, 44 USPQ2d 1358, 1361 (Fed Cir. 1997). While, of course, it is possible that it is inherent in the operation of the prior art device that a particular element operates as theorized by the examiner, inherency may not be established by probabilities or possibilities. *In re* Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) and *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re* Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Initially, Applicants note that this rejection is moot with respect to claim 2, which has been canceled by this Amendment.

Claim 1 has been amended to recite a combination of features including (1) an agitator roll rotatably installed inside the suction port, a plurality of brushes being arranged on the agitator roll in the length direction; (2) an agitator driving unit including a rotating driving motor having a drive shaft with a rotating lever attached thereto for generating a driving force for performing forward/backward reciprocating rotation in a predetermined angle for driving the agitator roll to perform reciprocating rotation in a predetermined angle range and a driving force transmitting unit for transmitting the driving force of the driving motor to the agitator roll; and (3) a resonance unit for resonating the reciprocating rotation of the agitator driving unit.

Applicants respectfully submit that EP '228 does not disclose this combination of features, either explicitly or inherently.

Most of EP '228's disclosed embodiments employ lever type brushes, not rollers. While EP '228's first embodiment, shown in Figs. 3-5, discloses an agitator roll, it is driven by a belt connected to the drive shaft of motor 104, and does not include feature (2) of claim 1.

Accordingly, the Office Action does not make out a *prima facie* case of anticipation of the claimed invention by EP '228.

Applicants' claim 3 positively recites a combination of features including, for example, a driving force transmitting unit that comprises (1) a rotary link fixed to a motor shaft of the driving motor and rotated coaxially to the motor shaft; (2) a hinge bracket fixed to one side of the outer circumference of the agitator; and (3) a connecting rod of which an end is hingedly connected to a position of the rotary link eccentric from the rotation center of the rotary link, and another end is hingedly connected to the hinge bracket.

The Office Action fails to make out a *prima case* of anticipation of this claim by EP '228 because the Office Action does not even address these features. Instead, it merely refers to certain numbered elements in EP '228 without indicating how those elements correspond to, or otherwise anticipate, the positively recited features of claim 3. Applicants cannot find this combination of positively recited features in EP '228.

With respect to claim 5, the Office Action refers to "a spiral spring resonance unit 204f" in this rejection but analysis of EP '228 reveals that element 204f, discussed in col. 17, lines 36-

43, is described as “a catch 204f fastened at the distal end of the rod.” Nevertheless, because EP ‘228 does disclose springs, Applicants will address the springs disclosed by EP ‘228.

One spring 107 is disclosed in the paragraph bridging col. 13 and col. 14, and is described, with respect to Figs. 6 and 7, as being “disposed between the other support plate 109 and a bearing 110 opposite it so as to constantly urge movable brush 105 toward the rotary piece 106 side.” An inspection of Figs. 6 and 7 reveals that spring 107 is used to translate the movable brush 105 from left to right, and does not have one end fixed to the motor shaft of the driving motor and does not have the other end fixed to the driving motor or the casing, as recited in claim 5, which is the only claim under rejection that positively recites a spring. A second spring, labeled as number 117, is disclosed in the second embodiment shown in Figs. 8-9, which moves tie rod 118 left or right. A third spring, labeled as number 123, is shown in the fourth embodiment of Fig. 10, and is used to constantly press and urge the upper extending portion of second brush 121 toward rotary brush 119 to permit second brush 121 to oscillationally swing back and forth about support shaft 122 due to the variation in height of cam 120 because of projection 120a (see Fig. 10 and col. 15, lines 16-56). A fourth spring 123, shown in the fifth embodiment of Figs. 11 and 12, and described in col. 16, lines 1-45, also urges second brush 121 toward the rotary brush 119. Additionally, an anti-vibration coil 316 is shown in Fig. 29 and discussed in col. 21, lines 7-20 to prevent movable brush unit 305 from vibrating.

None of the springs shown in EP ‘228 appears to comprise a spiral spring of which an end is connected to the fixed motor shaft of the driving motor and another end is fixed to the driving motor or the casing.

Moreover, claim 5 depends from claim 1 and patentable defines over the applied art for this additional reason.

Accordingly, EP ‘228 does not anticipate claims 1-3, 5 and 10-12.

Reconsideration and withdrawal of this rejection of claims 1-3, 5 and 10-12 are respectfully requested.

**Rejections under 35 U.S.C. §103**

Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over EP '228. This rejection is respectfully traversed.

Because the rejection is based on 35 U.S.C. §103, what is in issue in such a rejection is "the invention as a whole", not just a few features of the claimed invention. Under 35 U.S.C. §103, "[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." The determination under section 103 is whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made. *See In re O'Farrell*, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988). In determining obviousness, the Examiner must explain what the differences between the claimed invention and the prior art are and provide objective factual evidence to support a conclusion that it would be obvious to one of ordinary skill in the art to achieve the claimed invention, which includes those missing features.

In the second place, in rejecting claims under 35 U.S.C. §103, it is incumbent on the examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. *Uniroyal Inc. v. E-Wiley Corp.*, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), *cert. denied*, 488 U.S. 825 (1988); *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986); *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden

of presenting a *prima facie* case of obviousness. *Note In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be suggested or taught by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

A showing of a suggestion, teaching, or motivation to combine the prior art references is an “essential evidentiary component of an obviousness holding.” *C.R. Bard, Inc. v. M3 Sys. Inc.*, 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not “evidence.” *See In re Dembiczak*, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999).

Moreover, a factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. *See In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

Initially, Applicants note that EP ‘228 does not disclose the combination of features recited in claim 1, for reasons presented above. Accordingly, even if one of ordinary skill in the art were properly motivated to modify EP ‘228 as suggested, the resulting modified version of EP ‘228 would not render the claimed invention obvious.

The Office Action addresses the feature of brushes arranged in a plurality of rows in the length direction of the agitator feature by improperly relying on the *per se* rule of unpatentability that a mere duplication of essential working parts involves only routine skill in the art, *citing St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Applicants have read the cited decision and find no such statement therein.

Nevertheless, even if there were such a statement in the cited decision, the Office Action's position in this regard is completely at odds with established precedential case law of the Court of Appeals for the Federal Circuit because it relies on an improper *per se* rule of obviousness.

In fact, the USPTO Board of Patent Appeals and Interferences has pointed out the impropriety of relying on such a *per se* rule of obviousness. In this regard, Applicants reproduce the following statements from the Board's decision in Ex parte Granneman, 68 USPQ2d 1219 (BPAI 2003):

The examiner argues, in reliance upon *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960), that an additional reactor in Zinger's processing chamber would be a mere duplication of parts and, therefore, would have been obvious to one of ordinary skill in the art (answer, page 6).

The court in *Harza* stated that the only difference between the reference's structure for sealing concrete and that of Harza's claim 1 was that the reference's structure had only a single rib (i.e., arm) on each side of a web, whereas the claim required a plurality of such ribs. *See Harza*, 274 F.2d at 671, 124 USPQ at 380. The court stated that "[i]t is well settled that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced, and we are of the opinion that such is not the case here." *Id.*

The examiner does not compare the facts in *Harza* with those in the present case and explain why, based upon this comparison, the legal conclusion in the present case should be the same as that in *Harza*. Instead, the examiner relies upon *Harza* as establishing a *per se* rule that duplication of parts is obvious. As stated by the Federal Circuit in *In re Ochiai*, 71 F.3d 1565, 1572, 37 USPQ2d 1127, 1133 (Fed. Cir. 1995), "reliance on *per se* rules of

obviousness is legally incorrect and must cease."

[1] For a *prima facie* case of obviousness to be established, the teachings from the prior art itself must appear to have suggested the claimed subject matter to one of ordinary skill in the art. *See In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976). The mere fact that the prior art could be modified as proposed by the examiner is not sufficient to establish a *prima facie* case of obviousness. *See In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). The examiner must explain why the prior art would have suggested to one of ordinary skill in the art the desirability of the modification. *See Fritch*, 972 F.2d at 1266, 23 USPQ2d at 1783-84.

The examiner argues that one of ordinary skill in the art would have included an additional reactor in Zinger's processing chamber to permit simultaneous heat treatment of wafers in two boats and thereby increase the production capacity of the processing

chamber (answer, pages 6-7). Zinger, however, uses multiple one-reactor processing chambers rather than multiple reactors within each processing chamber (figure 1). The examiner has not explained why the Zinger reference itself would have fairly suggested, to one of ordinary skill in the art, the desirability of using multiple reactors within a processing chamber rather than using Zinger's multiple one-reactor processing chambers. For the above reasons we conclude that the examiner has not established a *prima facie* case of obviousness of the appellants' claimed invention.1

Furthermore, as stated by the Federal Circuit in In re Ochiai, 71 F.3d 1565, 1572, 37 USPQ2d 1127, 1133 (Fed. Cir. 1995), "reliance on *per se* rules of obviousness is legally incorrect and must cease."

In other words, the Examiner's reliance on this *per se* rule and on the cited decision to establish a *prima facie* case of obviousness of the claimed invention is fundamentally improper.

Moreover, the assertion that such a reversal would not change the operation of the device begs the question of proper motivation to provide such a reversal and fails to provide objective factual evidence or proper motivation to modify DE 75 13 261, as suggested.

Accordingly, the Office Action fails to make out a *prima facie* case of obviousness of the invention recited in claim 11.

Reconsideration and withdrawal of this rejection of claim 11 are respectfully requested.

**Allowable Subject Matter**

The Examiner states that claims 4 and 6-9 would be allowable if rewritten in independent form.

Applicants thank the Examiner for the early indication of allowable subject matter in this application. Accordingly, claims 6, 7 and 9 have been rewritten into independent form, and should therefore be allowed. Claim 8, which depends from claim 7, is allowable based on its dependence from claim 7. Claim 4 has not been re-written in independent form but is believed to be allowable because it depends from claim 3, which has been re-written in independent form and is believed to be allowable for reasons stated above.



**New Claim 13**

Claim 13 combines subject matter from claims 1 and 5 and is believed to patentably define over the applied art at least for reasons discussed above regarding claim 5 relating to the spring feature.

**Additional Cited References**

Because the remaining references cited by the Examiner have not been utilized to reject the claims, but have merely been cited to show the state of the art, no comment need be made with respect thereto.

**Conclusion**

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46,472, at (703) 205-8000, in the Washington, D.C. area.

Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants hereby petition for an extension of one (1) month to January 27, 2007 in which to file a reply to the Office Action. The required fee of \$120.00 is enclosed herewith.

Prompt and favorable consideration of this Amendment is respectfully requested.

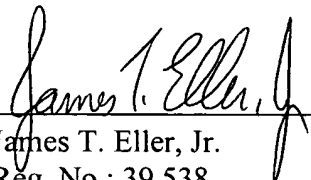
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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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